1908

V.

Bering Id

SHOUT
SHARE
IT

July 17 o.s. Reef ~~Reef~~ Kiistel.
29.

733 skins 8-53; 9, 110; 10, 138,
11, 211; 12, 161; 13, 50; 14 lbs. 10 8 lbs.

Reef 418
Kis. 315

total driven 2537.
Sikat 13
malki 1738
Godovik 23
pups 35.
} 733 kil.

July 21. o.s. Aug 2 Reef.
616 skins — 8, 42; 9, 54; 10, 140;
11, 150; 12, 140; 13, 90 lbs.

total Driven 2141
Sik. 8
Malki 1436
Godov. 14
pups 67
} 616. kil

July 23 O.S. ~~Reef~~ Kis.
No 4

217 skins. 7-9; 8, 35; 9, 40;
10, 27; 11, 31; 12, 50; 13, 20;
14, ~~5 lbs.~~ lbs, 5 ot.

Total 1047 driven
Sik. 7
Matk. 779
Godov. 9
pups 35
} 217. kol.

July 25 O.I. Reef.
No. 6

875 skins. 7 none; 8, 56;
9, 107; 10, 194; 11, 241;
12, 114; 13, 103; 14 lbs 60 ot.
total driven 3064
Sik. 11
Matk. 2014
Godov. 5
pups 159
} 875. kol.

1908; Bering Id.

July 27 05. Kisotchn
Aug 8

189 skins. 7 none; 8 lbs 10.
9, 30; 10, 60; 11, 48; 12, 11;
13, 20; 14 lbs. 10.

Total driven 1395.
Sik 4
Matki 1134
Gorov. 5
pups 63.
} 189 kil

July 31 05. Reef.
Aug 12
532 skins: 7 lbs 25; 8, 100;
9, 100; 10, 80; 11, 90;
12, 36; 13, 40; 14 lbs. 61 sk.
Total driven 2789
Sik. 5
Matk. 2077
Gorov. 74
pups - 104
} 532. kil.

July 27 05. Kisotchi
Aug 8

189 skins. 7 none; 8 lbs 10.
9, 30; 10, 60; 11, 48; 12, 11;
13, 20; 14 lbs. 10.

Total driven 1395.
Sik 4
Matk 1134
Godov. 5
pups 63.
} 189 kil

July 31 05. Reef.
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9, 100; 10, 80; 11, 90;
12, 36; 13, 40; 14 lbs. 61 sk.
Total driven 2789
Sik. 5
Matk. 2077
Godov. 74
pups. 104
} 532. kil.

Family SAL
The

FOUR-LEGGED
vomero-palatine
sphenoid in two toot

About thirty sp
family which in its
confined to Europe
India, and in North
resented by two spec
or terrestrial ; perfect

For each drive a special document "akt" has to be made out stating the number of seals taken, the name of the rookery and other details. This is signed by the Kosak and by the Starshena. To it is then attached the receipt "Kvitantsia" of the company's representative.

Aug. 13
Tuesday.

Arrived off North Ry, Bering Island, at 6 am. The weather cloudy and a stiff SW blowing.*

After breakfast went ashore with my cameras to photograph and see what could be seen.

The first thing that struck me was the diminution in the number of seals on the "sands" of the Reef. The land end of it has shrivelled up; the line of seals across it dividing it has disappeared, and the flock at the south east corner has become entirely isolated.

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*) Anchored in 7 fathoms; rocks off N.W. of Sivutchi Kamen visible on the N. side of it;. Sivutch K. N 85° W; Salthouse S. 15° W.

(13) To show this difference I took two photos from my old station on the landing of the salt house steps.

The next thing to attract my attention was the almost total absence of the old bulls. I do not believe there are a hundred left on the rookery. The "rookery organization" is evidently breaking up.

Next I noted that there was still quite a number of very small pups yet in company with their mothers and which have not yet "podded." I crept in close to the flock at the S.E. corner alluded to above

(13) and took a snapshot which I hope will show this feature. However, the clouds are low and dark, and the wind is howling mercilessly and shaking my camera so that I have but faint belief in any successful pictures. The point from which this last exposure (no. 86) was made, is somewhat nearer the breeding grounds than the one whence G. made his successful picture of which he gave me a print. It is situated on the "Ladiginski peninsula".

These facts have also been noted by the natives and my observations are therefore confirmatory of theirs. They

(13) visit that females are still bringing forth young.

Afterwards walked down to Kisotchnaia Ry. and took a photograph from the old Sta. T. It will show – if it shows anything at all – the same shrinking of the area of the breeding ground.

Returning I visited Lilivanof's house and there I got a partial explanation of this shrinkage (which does not seem wholly due to the season) in the figures which he furnished as to the animals contained in all the drives since I left the North Ry. I am certainly very thankful that J. adopted my suggestion to record the

733	2537	1134
616	2141	2077
217	1047	2014
875	3064	779
189	1395	1436
532	2789	1738
3162	12973	9178
	3162	
	9811	

(13) number and kind of seals turned away at the killing grounds. I copied the figures (see antea) of which the following is a summary:

From July 29 to August 12 (n.s.) there has been 6 drives, in which 3162 animals have been killed. But these were culled on the killing grounds out of a total of 12973, or nearly 13000 animals driven; or to put it otherwise, 9811 were rejected out of this ~~abov~~ total. But the most significant fact is that of these rejected ones no less than 9178 were females! Just think of it: in order

(13) to ~~bad~~ obtain a little over 3000 bachelors it was necessary to drive off over 9000 females! The excuse for this is that in as much as the bachelors do not haul out separately any more, it is necessary to drive the females as well; but it must not be overlooked that even in the old palmy days females were plentiful in the drives, although not to the same extent as now.

Yet, it cannot be emphasized too much: thus far there is no mortality visible among the pups.

Another feature of the above figures is the

424
990
1380
2021
1932
650
140
733) 7847 (10.7
733
5'20

80
270
600
528
132
260
140
189) 2010 (10.6
189
120

326
486
1400
1650
1680
1170
616) 6712 (10.9
616
5520

175
800
900
800
990
432
520
854
532) 5471 (10.3
532
151

63
280
360
270
341
600
260
70
217) 2244 (10.3
217
740

10.7
10.9
10.3
10.9
10.6
10.3
37
10.6

448
963
1940
2651
2368
1339
840
875) 10549 (10.9
875
1799

(13) continued absence of yearlings. Only 93 yearlings ~~and~~ but 9000 females! This is still more remarkable when we consider the great weight of the skins taken. In four of the drives there was not a skin under 8 lbs., while the average is over 10½ lbs.

This curious disproportion becomes extremely interesting when ~~being~~ compared with the opposite conditions on Copper Island. There the low weight of the skins, the people killing seals down to 4½ lbs! And yet there is no plenty of yearlings there either! And the same "scraping and

(13) raking" of the rookeries there as here. Surely, here is a good deal of food for speculation!

J. last night gave me the following figures as reported to him. Killed at North Rookery, B.I. to date: 5665 holluschiaki; 22 matki (accidentally, or because injured); 11 yearlings. On South Rookery, B.I. 324 skins.

During the entire forenoon and part of the afternoon the crew was busy taking on board the salted skins, first those that were bundled and finally the loose skins that are going to be bundled on board as

(12) well as a number from the last drives which have to be resalted on board the "Kotik". The skins are slid down a chute from the salthouse to the beach below. Here the natives load them upon their backs and carry them ~~down~~ out to the water's edge on the rocks, where they are dropped and where the ship's crew take them and throw them into the boat.

A little after noon the "Porpoise" was seen steering east 6 or 7 miles to the north of us.

The work of taking in the skins was finished about 4:30 pm. but as the S.W. was still blowing with unabated force, it was decided

(13) not to go round to the village this evening but to anchor up in a safer place somewhat to the east of the rookery.—

In view of the above mentioned "scraping and raking" of the rookeries for the last killable seal – and particularly in view of the fact that this is not the first year that it takes places, Mr. Shalavanski having this evening assured me that it has been thus for every one of the last two or three years – the question which he propounded to me ~~this~~ tonight certainly becomes pertinent: "Where do the killable seals of the next year come from?" If every bachelor

(13) seal within sight has been killed, how is it then that 10 000 to 30000 killables have been obtained the next year, besides the additions needed on the rookeries for ~~supplying~~ filling the yearly loss of bull? And if ~~they~~ all were not killed, where were they in the mean time? To these questions I had frankly to confess that I do not know, but that I think it is a fair theory to assume that a certain percentage of bachelor seals always stay in the water, and that only ~~a cert~~ part of them haul out ~~near~~ the

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(13) breeding grounds. I pointed
out that nowhere had
separate hauling grounds
of bachelor seals been
found _very_ far from the
breeding grounds. It is
not by any means
necessary to suppose that
this habit has been
acquired of late years,
(if such it be); it is ~~much~~
more likely that it has
always been so in view
of the fact that there is
no absolute necessity -
or immediate benefit to
the species - derived from
the presence of _all_ the
immature individuals
at or near the breeding
grounds. On the other hand

(13) it would certainly be beneficial for the preservation of the inborn tendency to yearly return to the native locality, if the habit was kept up by a large percentage of each yearly class of immature seals. This would then be an argument against the proposition to try to exterminate the seals in order to exterminate the seal question and the pelagic sealing. It cannot be done, as is also well shown by the experience on Tjulenij.

Aug. 14 Wednesday The SW wind blowing with great force we were obliged to lay to at our anchorage all day. Passed the time reading the latest newspapers – up to June 22.

Aug. 15 Thursday The wind ~~being~~ having moderated somewhat and being more southerly we left our anchorage for Nikolski at 6.25 am. The swell, however, was tremendous and it was 11.30 am before we came to anchor. The landing then became the next problem, but as we were anxious to get ashore and at the same time not wished our things to get wet, we left them behind, except my camera box. Our boat consequently not being very heavy we

(15) landed dry on the Reef, and I was once more "at home". There is nothing to be done, however, for the wind and swell continues so nothing can be brought ashore, and as the next trip is to be with the "Kotik" to the South Rookery, S.I., I will have to wait till she has unloaded her goods.

~~When~~ I mentioned this evening to Mr. Kluge that I had observed a number of very young pups on the North Ry. the other day, and at the same time expressed the opinion that this is nothing unusual, but that now the rookeries and the seals are under constant and

(5) anxious inspection many things appear unusual and new simply because no attention had been paid to the questions in the years of plenty. Mr. Kluge at once agreed in so far as this point is concerned, for it was his own observation on Tjulenij in former years that some pups ~~many~~ were regularly born very late in the season.

Aug. 16 Friday The "Kotik" has been busy unloading and I getting ready for the trip tomorrow to Polu-djonnaja Rookery. We are ready to start in the morning.

Weighed myself – 148½ lb. (4 pud 4½ lbs Russ.)

Had a good Russian bath before going to bed. –

To Bering
Rekopa R.
Poludionnaja

Lesnigusk about 54°57'
waterfall

Aug. 17
Saturday.

Bright and early I went on board the "Kotik" and after breakfast we started for Poludionnaja Rookery, in front of which anchor was dropped about 11.15 am.

I had hardly time to greet my old friend Nikanor Grigorief, the "Professor", as we used to call him, now starshina of this rookery, as the captain only gave me to 2.30 pm to get through with my work. Consequently, I started at once for the rookery with my camera and plane table.

The breeding ground — for I saw no holustiaki — is the merest little patch, with not a single sikatch at the

(17) present. It was said in the village that there had only been one sikatch this season, but Nikanor informed me that so was not literally the case, the number having been five. Thus far he had secured 405 skins.

I was able to get very close to the grounds which were occupied by matki and pups only. A good many of the latter were in the water - where of course quite a number of females also - but there was also quite a large pod of smaller pups right at the posterior ~~upper~~ edge of the herd. I was again impressed, as before on Kishotchnaja, by the action of the females and young

(17) when the former haul up from the water and go in search of the young to ~~be~~ nurse ~~suck~~ her. The ground is here so small that it is a comparatively easy task for the mother to find its young, and I consequently observed several dripping wet cows nursing pups. The mothers in coming out of the water made straight for the pod of pups and the usual performance of pups rushing up and ~~[illegible]~~ upon being nosed at critically repused and the search continued was gone through. So much is absolutely certain, the females do not nurse the pups promiscuously.

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(17) I am thoroughly convinced by what I have seen that the mother wanders considerable distances and spends ~~considerable~~ much time in searching for her own individual child. Whether a mother who had searched in vain for a long time and whose milk was pressing her very strongly might not finally give in to the importunities of a particularly hungry pup is ~~something which~~ a question which it will probably never be possible to answer definitely, but I think such cases are the exceptions; the rule is certainly the reverse.

(17) The rookery is situated to the west of the water-fall on a steep pebbly beach at the western third of a wide curving bay, outside of which there are a number of rocks. The breeding seals and their pups occupied a small semi-circular area on the beach. A number of them were also seen upon the rocks to the westward.

After the inspection of this rookery, which certainly looked quite different 13 years and 4 days ago (Aug. 21, 1882) when I estimated the number of seals to be 20000 to 25000, ~~a num~~ (see Deutsch. Geogr. Bl., VIII, 1885, p. 238) a number certainly too great

(17). but on the other hand description of a condition widely different from the present handful of seals — I continued my walk along the shore until I reached Steller's arch, of which I made several photographs, finally returning the same way to the landing place.

I tried ~~too~~ very hard to get a photograph of the arch from exactly the same standpoint as my sketch, (published in Deutsch Geogr. Bl. VIII), but in vain. The eye is much more wide angle than the lens, and I had to stand my camera at a much greater distance

(17) in order to get the entire arch in.

Lindquist at noon got a very good observation by the waterfall for latitude which he determined to be 54°57'N.

After supper we arrived in Gavan again, where we found H.B.M.S. "Porpoise" at anchor next to the "Jakut". "Jakut" left shortly afterwards, and so did the "Kotik".

This was the last trip of the "Kotik" to the islands ~~before~~ until she finally touches here ~~before~~ on her way to San Francisco, probably about the 8th of September. As I have not been able to make any other arran-

(7) gencies I had to answer Mr. Malavanski yesterday when he asked me, that I should probably have to go with him til San Francisco, although his date is earlier than I could wish it. If I do I shall be unable to settle for myself the question whether here is any unusual mortality among the pups in fall on the rookeries here. It has been impossible to approach the captain of the "Jakut" as I and he do not seem to be on speaking terms. "Jakut" is therefore out of the question. Tomorrow I shall have to put on civilized clothes again and call on

(17) the captain of the "Porpoise". Something may then turn up. We shall see!

Aug. 18 Sunday When the service flag on board the "Porpoise" was taken down G. and I went on board to call on the captain. The reception of the "governor" of the islands was as ceremonious as could be desired by the most exacting. As we arrived a line of red coated white-helmeted marines presented arms as well as when we left, and as we were well again in our boat the Russian flag was saluted with ~~seven~~ nine guns. No flies on us!

We only saw the captain and the first officer, both very nice and agreeable

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(18) gentlemen. The visit lasted almost an hour. The "Porpoise" sailed about 6 pm.

In the afternoon I finished up the sketch map I made yesterday of the environs of the Poludjonnaja Rookery.

Today I witnessed scenes which I never believed I should see on Bering Island, and which would have been impossible 12 years ago. Then the natives were forbidden to make "beer" of sugar, and it was not allowed to sell them liquors. On special occasions, or as a particular premium for extra exertions or services G. used to treat them to a drink, or occasionally

(18) a bottle. Since then things have changed. Who is responsible for the abolition of that wholesome law I do not know, but whoever it is, he has ruined the population of these island. Now the natives are allowed to ~~by~~ buy – individually and collectively – as much spiritus as they can find money to pay for. The "community" imports it by the whole sale, and on the big holydays it is divided up according to "shares". G. told me that they took out for today 200 rubles worth. It is big prasnik – Preobrazhenski – the transformation – and ~~all the~~ Even Bering

(18) Islanders has been transformed into a drunken beast, the Russian fashion of celebrating a church holyday. During the afternoon three men had to be arrested on account of their fighting. Hearing this the starshina, Pietr Onydukowski jr., otherwise a quiet and unobtrusive man, in a drunken crazy spell rushed to G's house and told him that he had no business to arrest these men and acted so wildly that he had to be locked up too, and will cease to be starshina. And all this for this miserable cursed liquor.

Aug. 19
Monday.

With plenty of rain and wind outside this was an ideal day for packing up, and I have done nothing else. Yet, I am not through. The difficulty is not about what to pack, for there is very little to bundle up and stow away. There have been no opportunities for collecting. My gun has not been out of the case yet, except for oiling. Birds are exceedingly scarce, and moreover, when should I find time to hunt birds. The seals have had the preference every time the weather has permitted. The difficulty therefore is not the overwhelming quantity

(19) of the stuff, especially since the natives bring nothing in as I have refused to promise to pay with alcohol, the only thing which nowadays can move them but the trouble is that I do not know exactly how to pack the few things I have - possibly just because they are few. Then, in addition, I do not know yet exactly how and when I am going to leave the island. The "Kotik" is expected here on its way to San Francisco any time between the 6th and 10th of September. There are two reasons why I have not yet made up my mind definitely to

(19) go on her. First, there is one more important question to ~~settle~~ investigate here on the islands and that is whether there is any abnormal mortality among the pups on the rookeries late in fall, or not. Thus far there have been no indications of such a state of affairs, but it is too early yet to say for certain that there is no such mortality, or that there will be none. Second, I would like very much to return by way of Japan.

J's disagreement with the captain of the "Jakut" makes it inexpedient to attempt any passage by that vessel. The captain

(19) of the "Porpoise", on the other hand, voluntarily told me that he could take me to Hakodate, when he leaves after October 6th – provided I am here on official business. This making the thing so exclusively and expressly official causes me to hesitate, the more so since he ~~made~~ extended no definite or formal invitation, and I should not like ~~to~~ to request him to transport me. However, when he leaves the island on Thursday or Friday next, I will try to have him invite me to go with him to Petropavlovski to take the "Kotik" there. Till then I will defer making a

(19) final decision. I ~~could~~ can easily leave the islands now for there is nothing on the rookeries ~~[illegible]~~ to specially engage my attention at the present time, and were it not for the possibility of the extra mortality among the pups later on, I would not hesitate a ~~moment~~ minute in returning at the earliest possible moment. As I intend to make another inspection of North Rookery on Wednesday and Thursday next I will have to get my things packed, in case I should get the chance to go to Petropavloski, and they must be packed with that possibility in view. And

(9) here is where the difficulty lies.

J. this evening made mention again of the "socalled" "secret", that the naval guard which was stationed on Tjuleniy in order to protect the island against the poachers, on the contrary made common cause with them, 3000 skin being thus secured. Whether the thing is to be hushed up or not in St. Petersburg, time will only show. This custom of stationing a naval guard of an officer with 20 men during the summer and fall dates from 1884.

Aug. 20
Tuesday.

Finished packing, and as the weather was decent tried to do some photographing about the village, but the mosquitoes soon drove me in. They were awfully bloodthirsty and very plentiful. There was but little wind, and it was warm for being Bering Island, viz 55°F., so the mosquitoes had a good time while I had not.

Grebnitski mentioned this evening that a species of bat is now found at the village, but that he had failed thus far to get a specimen. It was first found a couple of years ago. It is evidently introduced from

(24) Kamtchatka in the fire wood.

Upon inquiry I found that the jurte village at Stary Gavan has been razed and that only one man, Vasilij Stepnof, now keeps any garden there. All the gardens are now as Frozokkija.

In the afternoon observed a regular 22° sun halo.

Aug. 21 Wednesday The dog sledge appeared at the door at 10 am and in a quarter of an hour I was off. It was a dense fog with prospects of rain, but it looked to me as if the north side might be clear. G. however, remained behind.

The trip to Severnij was unsuccessful. The dogs are

(21) good, but the driver young and not very skillful, so he managed to drop me off the sledge just as we entered the Serving village. The road was not so wet as formerly so the drive was more comfortable for man than for beast. As suspected there was no fog on the north side, though it was cloudy and rather dark.

Kranaja Riba were pushing their way up the little streams and hundreds upon hundreds were laying dead already along the entire way. Took a couple of photos which ought to show it well, though I

(21) did not manage to photograph a scene with any extraordinary number of dead fish, as I did not wish to go far from the track.

Upon arrival at Jenny (about 3.15 pm) I put up at the Company's house which I found even dirtier than before and made my dinner of hard tack and corned meat with tea. And this is what Mr. Kluge asks 75 ¢ a day for. There can be no doubt that he is going to charge me too much for board and lodging, but then I am helpless and will have to pay.

(21) Went at once to the rookery, but as the wind was bad had to watch and photograph from the distance only. The seals have now left the "sands" almost entirely, and most of the females were in the water. The pups are spreading, and a lonely sekatch was seen here and there near the waters edge. On Sivutchi Kamen I observed a single sea lion cholostiak among the seals.

From the Reef I then went to Kishotchnaja with the same result. Females, and especially pups,

(21) now hauling out on all the rocks in the water on both sides of the rookery.

In the mean time the "Porpoise" had arrived and anchored off the rookery. A boy came running to Kishotchnaja to inform me that a boat had been landed and that some of the officers were on shore. I at once returned and found the captain with the doctor and another officer who were making inquiries about the drive tomorrow morning. It was decided to have it come off about 7 am. Much against my protest, on account of my

Chief [illegible]

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(21) costume the captain carried me off to the vessel for dinner and to stay one night. So spent a very pleasant evening and night in the captain's cabin.

Aug 22. Wednesday After having taken breakfast on board, the captain & I in one boat and officers and petty officers to the number of about 20 in another went ashore about 7 am. and found the Starshina with the natives waiting. Very shortly after the whole company, Indian file, proceeded to the reef rookery and in short order drove off nearly all the seals located on the reef itself.

(22) The whole place, after the drive was over was completely razed not a seal left. The whole breeding ground, not located on outlying rocks — and it was now low water — was gone over and nearly all driven off. The Englishmen in boots and smoking at a great rate enjoyed the unusual sight immensely.

4 Down on the rookery ground I was startled by the great number of dead pups. I was wholly unprepared for this, because at the great distance from which it has become necessary to watch the rookeries here, the small bodies of these

dead seals have not been noticeable; in fact, I do not see how in the binocle they could have been distinguished from sleeping ones. ~~It was easy to distinguish~~ Those ~~which were~~ lying in a wind row along the ~~sea~~ high water margin of the rookery were most conspicuous. These had evidently been washed ashore. A good many of these were in an advanced stage of putrefaction — some entirely flattened out and without hair. But an equal proportion ~~had~~ evidently died more recently being in good condition. There was another class of pup carcasses, viz those which were

Those in mud ones did not necessarily die at sea; They died at low tide and were washed up.

lying dead upon the ~~upper~~ higher portion of the breeding ground "way back from the water's edge." These were mostly all in good condition and appeared as if they had died within a few days.

When the seals were driven off, as many of ~~the~~ the pups as possible were allowed to escape into the ~~water~~ sea, and they availed themselves of the opportunities offered to go off in large flocks. But there was a considerable number of pups that stayed behind singly and which upon our approach made but feeble attempts at getting away. Evidently something

(22) was the matter with them.
Upon closer examination
they were found to be
very weak and their thin
and pinched appearance
(22) at once noticeable. They
were starving. Their shoul-
der blades and ribs and
hips were sticking out
in strong contrast with the
rounded and plump
forms of those which
scampered off with the
others. Upon handling the
~~dead~~ carcasses, both
in the wind row and in
the higher ground the
same state of affairs was
apparent: extreme lean-
ness, and emaciation.

After the rookery had

(22) been completely cleared I took my notebook and walking along the beach began to count the number of dead pups, making a distinction between those that were in good condition and those carcasses that were in an advanced stage of decay. I had gone about half way round and counted about 200 of the former class and 150 of the latter (last leaf of this note book) when the starshina arrived and said he had order from the Kosak Silivanof, to ask me to leave the rookery at once. It was evident later that Silivanof was uneasy becau

he thought the number of dead pups might in some way become charged against the management, for he tried to make the whole thing a small affair and explained to me that the number of dead pups was due to their being trampled upon by the sikatchi. But for three very good reasons this theory does not hold: (1) In the first place, there are now very few sikatchi on the rookery at all, entirely too few to be able by any possibility to kill even a small fraction of the pups which have recently died.

(2) If this trampling upon

(22) caused the death of so many pups, how many should we not expect in a drive like the one today, where ~~up~~ hundreds ~~upon hundreds~~ are trampled upon, not once, but over and over again. Yet, not a single dead pup was found in the wake of the drive!

(3) This explanation does not account for the emaciated condition of the bodies of the dead ones.

Seeing the necessity of complying with the order to leave the rookery I could not finish my count. I am pretty positive, however, that the

(22) following estimate is not much out of the way. I may preface it by saying that the number of dead bodies on the east side appeared to be about double that on the west side.

Dead pups on west side counted about	350
do. do. on east side estimated	700
do. do. on high ground about (estimated)	200
Total	1250

Without making any allowance for bodies overlooked as hidden among the rocks etc. etc.

In walking off the rookery I took from the ~~alt~~

(22) high ground 2 bodies which seemed quite fresh and from which, therefore, it would seem possible to determine the cause of death. In lifting the second up by the flippers I was somewhat startled by finding it still gasping, but it was much too weak to give any sign of life when lying on the ground. I carried it up to the killing ground where the rest of the company had congregated, but the pup had died before I reached them. The other pup had apparently died during the night. I left the pups with the Kosaki's boy to carry to the house, and in reaching home I found that in his

(23) zeal to serve me he had already started to skin them – local fashion – thus spoiling them for specimens. However, for my purpose of a postmortem they were all right. I took the ship's doctor with me, Dr. Lloyd Thomas, who on viewing the opened bodies with me agreed that death was due to inanition, lack of food; starved to death. There was not a trace of fat left in the tissues under the skin, nor on the muscles. The extreme leanness of the carcass was very noticeable. Both of us, afterward, ~~called~~ commented ~~special attention to~~ upon the plumpness of the average pups as they appeared in the

drive.

I satisfied myself, while on the rookery that the fresh ~~carcasses~~ bodies on the windrow were in the same condition, and the fact that they were thus thrown up on the beach by the water signifies but little, for we have had no severe weather as yet, and it is therefore impossible that ~~all~~ these pups could have been killed by any "surf nip". They died at low ebb.

There was another matter to which I called the special~~ly~~ attention of the English gentlemen while we were on the rookery, viz the presence, and very offensive smelling presence of semifluid excrements on the rocks and stones, particularly mentioning that the British Commissioners in their reports had stated the reverse to be the ~~fact~~ case. In fact, the fecal matter was making it very slippery in places, and to it was added the yellow clotted milk vomited up by the pups as they were hurrying out of our way.

A few of the pups have assumed the gray coat, but the great majority are still black.

I was very anxious to take a few photos of some of the leading features of todays drive, but the weather permitted. In the morning it was a foggy drizzle, dark and disagreable, and in the afternoon it turned into downright rain. +50°F. All I could do was to make a few film snap shots with my 3A (which I could carry under my rubber coat) during the middle of the day showing some incidents of the killing. These were enjoyed immensely by the Englishmen, and I believe almost every man on board was given a chance to witness at least the killing.

Capt. Francis R. Pilly kindly offered to take me round to Nikolski tomorrow

(22) and from there to Petropaulski where he has to go no later than the 24th. As it was reported, however, that there is fog in the village today and as the wind is southwesterly which may make landing difficult I had to decline the invitation as I cannot go to Petropaulski without my things, which _might_ be necessary if he ~~cant~~ cannot land ~~the~~ in Gavan tomorrow. Under these circumstances I think it is safer for me to take dogsledge tomorrow morning early for the village, and I have consequently ordered one for 7 am. tomorrow.

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(22) The drive was the next to the largest of the season yielding 903 skins. No exact tally of the escaping females etc could be kept partly because killing was going on in several places at the same time, partly because the presence of the many spectators who materially interfered with the count. However, the drive did not in this respect differ from the foregoing ones as fully 4000 animals were driven off the rookery. Whole pods had to be let go because not a single holustiak was among them. The average weight was probably somewhat less than formerly, but the skins were of very good size indeed.

(22) As usual with similarly large drives of former years the seals were driven in squads of 200-300 and not in one big body. On the killing ground they were again collected into two large herds. The separating out of the killing pods was very quick and deliberate and not attended with the same worrying of the whole herd as was the case with the drive I witnessed on St. Paul, where the animals had to be driven several times into the lake to cool off.

This enormous big drive during which the

(22) whole breeding ground of the big rookery was literally swept clean. I suspect to be due to the fact that the men have already received their share – or the greater portion of it – of the community payment for the skins turned in this season. The amount was considerably below that of any former year and this whole-sale effort is evidently brought on by a desire to add to the fund to be finally distributed, as otherwise many of the inhabitants will run short of what may now be fairly termed as necessities of life.

Some of the difficulties attending travelling with dogs

(22) was sadly exemplified tonight, for as I was going the change six plates in my holders by the light of my ruby lantern which broke on the first dog sledge trip, I found that of the six plates in the box, 4 were broken into fragments and 2 thereby scratched so much as to have become useless. So I had to give up changing plates as I had no others with me.

This evening a man brought me a partial albino of an Uria arra. Only the anterior part of the head and the throat are black; on the rest of the upper part of the body there are

(22) a few scattering black feathers among the white ones. The wings are black irregularly marked with white both on coverts and quills, and almost symmetrically on the two wings; tail white. Iris brown; bill black; feet above clay colored, webs and soles dark brown. It was shot at Japadeng ~~this~~ last evening, but the bill was shot off and it was too wet and dirty to be preserved.

Silivanof brings me the following tally of the drive ~~yesterday~~. It was evidently kept by some of the boys as I know S. did only attempt a count at the beginning of it. It is as follows:—

(22)

Sikatchi	8
Matki	2948
Yearlings	181
Pups	295
Holush.	905

Total 4337

1 matka died on the road.

Weight lbs	
7	4
8	85
9	139
10	215
11	203
12	179
13	28
14	52
	905.

However, the above proves at any rate pretty conclusively that my estimate that over 4000 animals were driven was accurate. The proportion of females to killed males may therefore be taken as correct. It is interesting to note the somewhat unusual large number of yearlings, but after all, what a pitiful showing in this class! The weight is up to the former average notwithstanding my impression to the contrary which was based upon the returns of the earlier part of the killing.

Aug. 23
Thursday 7 am. A last look at the rookery shows that the females and pups have returned to the same place as before, the rookery looking today exactly as it did yesterday morning before the drive. I expose a plate

but it is doubtful whether it will show much.

Vasilij Burdukofski, although ordered to be with his dogs at my door at 7, did not show up and when at 9 I found that Ivan Budakof's sledge team had arrived from Saranna, I engaged him at once and off we went. It had rained heavily during the night and the roads were consequently in a frightful condition. The dogs literally dragged me through a continuous mud puddle for more than twelve miles. Add to this a nasty drizzle and you may imagine how comfortable a ride it was especially as I had to fight off the ravenous mosquitos with my mud begrimed hands. Covered with mud and blood - from the mosquitos - I arrived in Gavan about 12.30 pm. via Ladiginok, where I found 4 frame houses, one roofed with sod, the others shingled.

The pup carcass was at once put in alcohol, civilized dress put on and the things packed and made ready for departure, for the "Porpoise" was already at anchor in the harbor. Shortly after Dr. Thomas arrived with the captain's invitation to come on board and go to Petropavloski. He and I then made a call

(23) on Grebnitzki. I specially informed the latter of the number and condition of dead pups found yesterday on the rookery and suggested that he order a detailed count at the end of the season, which he promised to send me by the "Jakut".

The captain also came ashore and at 5 with the officers I went on board the Razboin, where I was made as comfortable as a man can be on a vessel, and spent a very pleasant evening.

~~Aug 2~~ G. told me that it was the intention of making two or three more drives on the North rookery and expects to

(23) have about 2000 skins per the "Kotik" observing that of late years the greatest catch was made in August, as the seals arrive so much later. To this is to be remarked, however, that the great catch of 905 skins yesterday was only due to the extraordinary large number of seals driven off, and that there was no greater proportion of killables than earlier in the season.

Aug. 24 Saturday. The day passed pleasantly on board and was spent in reading, conversation and and watching the races on deck between the men gotten up by the officers. The latter

(24) in the evening invited me to dine with them in the ward room.

The weather was moderate, but cloudy and cold, I was perfectly comfortable.

Aug. 25 Sunday. Cloudy and foggy and big swell, but fair wind. Sighted land about 1 p.m., but did not get any good view of the mountains which were mostly enveloped in fog and clouds. Avatcha Bay entrance and the harbor were the same glorious landscape as formerly. Upon coming to anchor went immediately on board the "Kotik", but returned late with Capt Pelly and had supper on board the "Porpoise" with him and Lindquist and my old friend

(25) Capt. Grönberg of the "Bobrik" which we found at anchor next to the "Kotik". The "Jakut" is also here.

Grönberg reports about 1300 skins from Tjuleni; Females were numerous and sikatchi in about the proportion of 1 to 40.

Malarewski is not quite well yet. I told him of Grebnitzki's intention to visit Copper Island in the "Jakut" and to return to Bering with the "Kotik".

Aug. 26 Monday. A glorious morning. Kronotskaja Sopka looms up in the back ground, the same magnificent sight as always. Wish the photos may ~~show~~ render at least a fraction of

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its beauty. How green and attractive do the trees look on the hills! And then the incomparable bay in which all this glory is reflected!

Grönberg mentions that there was an unusual mortality among the pups on Tuleniy. Also that the yearlings were quite scarce. The skins taken were of good weight.

In the forenoon attended with Malavanski an auction of 5 or 6 sea otter skins. The auction was conducted by the ispravnik and his assistant in full uniform. The attendance consisted of some of the merchants and nearly all the officers

(26) of the Jakut, of which
the captain purchased
one large skin and the
doctor another, somewhat
damaged one. For the good
skins the price ranged from
about 500 to 605 rubles
apiece.

By the kindness of
the chief engineer of the
~~St~~ "Porpoise" I had a
chance of changing plates
and was thus enabled to
make several exposures which
I hope may show some features
of the fine scenery which
surrounds us.

Aug. 27 I set a couple of traps
Tuesday. for mice and voles last
night and visited them this
morning, but not a single
570 one had been touched.

(27) Potpongin also asserts that the smaller mammals are now very rare and that one has to go way into the interior or into the mountains to find either Spermophilus or Arctomys. Waiting as we do for the Company's steamer from Vladivostok before the arrival of which we cannot sail, and also not yet knowing whether we can clear from this port without having all the skins aboard taking the rest on the islands it is impracticable to leave the immediate vicinity of the vessel.

In the afternoon made several visits up-town, to Sandalin, Mr. Paety and finally

(27) the Russian doctor, Dr. who informed me that he had found two kind of salamanders in Kamtchatka and one lizard. Upon producing the specimens I found that he had two adults and a number of illy preserved larvae of the *Salamandrella wosnessenskyi*, and that the lizard was only a dried up specimen of the same species. He promised me one of them.

Spinitry and I took a walk out to the cemetery which we found in a very delapidated and disgraceful condition. In contrast to this I may in justice mention that the streets, especially the bridges

(27) and the plank sidewalks are in better condition than 12 years ago. Grönberg in again alluding to the mortality of the pups on Tjalenij mentioned that he had based his belief that they had been killed by the sikatchi stepping on them upon the fact that the ~~carcasses~~ bodies were very much flattened out, but upon reflection he agreed with me that the flattening out of the body is rather due to their being walked over by the numerous seals after death, not before.

The "Jakut" left in the evening.

Aug. 28 Wednesday. Rain and fog! This is very much as on the islands, the result being the same; nothing can be done out of doors.

(28) Called on the "ispravnik" at the Spravlenie and found him a pleasant although rather retired gentleman of few words. He has only been here a few weeks.

Got one *Microtus rutilus* in a trap and skinned him.

Aug. 29 Thursday Weather fine, but can go nowhere except just round the vessel on account of the uncertainty of leaving due to the nonarrival of Mr. Grunewald's steamer. Under these circumstances I dare not go beyond hail, especially since it is not even certain that the "Kotik" will have to return here from the islands for her clearance.

574 Have been through the stores to see if I cannot

pick up something Kamtchadale for the museum. There are a number of Kuklankas, shoes and mittens, but they are made by the Russians for the market and there is nothing aboriginal about them. It would be dangerous to bring them home as having any bearing on Kamtchatkan ethnology, so I will not spend any money on that trash. On the whole, there will be precious little for the museum. The prices, besides, are enormous and are intended for the man-o'-war's men altogether.

Aug. 30 Friday. Still no steamer, but "Jakut" returned this morning after a cruise in the outer bay of some hours' duration;

1301 Obtained ~~the following~~ data from capt. Lindquist concerning the seal catch of late years, which are in a separate table.

No mice in the traps.

Spectrable frame broke

In the evening there was an entertainment given aboard to "Porpoise" to which we all were invited. The blue-jackets went through a very creditable programme of song, music etc. which was very much enjoyed. Said good bye to the captain and officers with thanks for their many kindnesses as the "Porpoise" leaves the harbor tomorrow morning.

Aug. 31
Saturday

There being no steamer yet in sight, Capt. Lindquist and I took a long walk from which we did not return until 4.30 pm. We went first round the lake and from its northern end walked up to the top of the second ridge in the direction of Koriatskaja, he armed with my camera and tripod, I with my gun. Hardly a bird was seen on the whole trip except a single _Nucifraga caryocatactes_ which disappeared before I could get within range. This scarcity of birds is very remarkable. Thus far I have only observed: _Em-_

(31) oriza variabilis; Phylloscopus borealis; Cuculus peninsulae. Parus kamtschatkensis; Sitta albifrons; Motacilla kamtschatica; M. melanope; M. albostriatus; Corvus orientalis; Pica kamchatica, Locustella ochotensis; L. certhiola;

Hirundo tytleri had already left before my arrival.

The most interesting part of the days work was the finding of obsidian implements and chips on an old village site at the lake just where the road to Sareglaskij turns up towards the hills. They were found, some on the surface of the trail, some by digging into the earth just under

(37) the grass roots.

From a large number of crabs brought up by the seine today I selected the two extremes, the broadest with narrowest side spines and the broadest with bluntest side spines. These two specimens which I have preserved are the two extremes of a very large series, about 30 which to my mind prove conclusively that Teleni's figure is entirely incorrect and must be left entirely out of consideration.

In the evening shot a short-eared bat.

Sep. 1 Sunday. Threatening, dark weather. Capt. Lindquist gave me an account of the seizure of schooners

(1) off the Kommandor Islands
in recent years.

In 1891 the "Aleut" seized
James Hamilton Lewis, American,
caught right under the
South Rookery, B. I. ~~July 16, 11 pm.~~

In 1892 no less than
7 schooners were seized. The cruiser
"Zabiaka" seized 4, one American
and 3 British. "C H White of
San Francisco", ~~William~~ July 16 '92
11 pm between Copper and Bering I. –

Willie McGowan (Victoria) was seized
next, in Petrop. July. 28. Then
British Schooner "Ariel", arrived
in Petrop. Aug. 6. – "Vancouver Belle"
was not seen by the "Kotik".

"Carmelite," of Vancouver, was seized by
the admiral Makaroff in the corvet "Vitiaz"
latter part of August.

"The "Rosie Olsen" of Victoria
B.C. capt W. Keafe was seized
by Grebnitzki in the "Kotik" on

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July 26. Aug. 21.

(A) July 26, 1892. The "Kotik" left North Rookery at 1.30 pm for Nikolsky and at 2.20 pm sighted the schooner in NW about 8 miles distant. G. ordered chase and she was captured about 3.45 pm in Lat. N. 55°23'20", Long E. 167°27'. and towed to Nikolsky where they arrived at 9 pm. On the way 5 canoes with their crews returning from the hunt were picked up. A prize crew was put on board, the schooner arrived in Petropaulski Aug. 2.

The "Kotik" while in Glinka, C.I., Aug. 21, 1892, sighted a schooner at 1 pm to the eastward. Grebnitski ordered chase; ~~she~~ left Glinka 1.40 and got up to the vessel after making 12 miles E 1/4 S from Glinka, She

(1) was found to be the "Maria"
of Maitland, N.S., S. Balcam
capt. Only one boat, the
capt, mate and 2 men were
on board, the remaining 21 of
the crew with 5 boats and one
canoe were out hunting. Fog
coming on nothing could be seen
of them and the "Kotik" went in
search of them heading for SE
Cape. One boat was picked up
4 miles from the Cape, and
2-3 miles from the cape, two
more boats. They all had seals
in the boats, 17 in all three.
Position of "Maria" when seized
Lat N 54°36, Long E 168°24'.
The schooner picked up the other
boats during the night. She was
sent to Petropavlovski in charge of
a prize crew, arriving Aug 28.
All the skins (except 1000 reserved
582 by the government) were sold by auction
in Petropavlovski; the rest in Vladivostok

Sep. 2
Monday.

Went with Lindquist to Sareglaska in order to look for stone implements, but found none. Sareglaska is a small village of a couple of hundred inhabitant about 3¾ verst W. of Petropaulski in Avatcha Bay. The place looked considerably cleaner and more prosperous than Petropaulski. Took a few 3½ photos.

In the evening the dog Fanny caught an arvicola but bit it so terribly that I despaired of being able to preserve it. As it is the only specimen of the species thus far obtained I went to work, however, at once to clean it and skin it, and in the hurry forgot to take any

(2) measurements. This must be an "off" year for mice as I have failed to get more than one specimen in my traps and my promise of paying 20 Kop. for each mouse or bat brought in by the boys has not resulted in procuring any.

This is the 25 years anniversary of my immatriculation as student at the Kristiania university. Tonight all the old boys – or as many of them as are alive and have been able to go to Kristiania are together and my thoughts and best wishes are with them and the old country.

Sep. 3
Thursday.

Spent almost the whole forenoon trying to fix up the Arvicola and succeeded in making a skin which will have to do in default of something better. Set 10 traps in the evening.

Malavanski has finally got tired of waiting for Mr. Grunewald and his steamer, and has decided to go to the islands tomorrow in order to take the skins, returning to Petropaulski as soon as possible. I am glad of it, for this stay in Petropaulski within beck and call of the steamer is only wasting time, as there is no chance of collecting anything of interest, and while I may not be able to do much on the island on account of the hurry, yet I will have a chance to see North Rookery, B. I. once more.

In the afternoon took a

(3) walk with Lindquist and picked up a fine fragment of an obsidian implement. It was found in the path at the southern end of the narrow strip of land which separates the lake — or lagoon — west of the town, from the bay.

Sep. 4
Wednesday
Not a single mouse had been near the traps when I looked after them this morning.

Visited Dr. Tushof who had just received from a man in the interior a bottle with specimens in alcohol, mostly insects. It also contained a *Salamandrella* and a *Petromyzon*. Dr. T. collects them for the present governor in Anadyr, who is somewhat of a naturalist,

(4) man particularly anthropologist from Moskva.

Received from the capt of the "Yakut" invitation for tomorrows celebration of the battle of Petropaulski Aug 24 1854.

Mr. Malevanski stuck to his determination to go to the island and at 1.45 p.m. we steamed out of Petropaulski harbor. Cloudy, but clearing up outside. Sea smooth. Met in the entrance to Avatcha Bay the four masted schooner Ethel Zane, of San Francisco, loaded with lumber for the new light house.

Sep. 5 Thursday Wind against us and a tremendous sea. Sick; in bed all day. Hove to.

Sep 6 Do

Friday do

Sep. 7 Do. do. Got up for supper

Saturday as weather is moderating somewhat. Finally in sight of snow patches on Bering Island.

According to Lindquist the Alaska Commercial Co's lease expired in February 1891, for which reason it claimed and got the sealskins of the full catch 1890, some 5000 skins which the "Alexander" received before May '91. The transfer to the new company was effected that summer. According to the new contract the Government receives 11 rbs per skin, of which it pays to the natives rb 1.50 per skin killing and salting. The company has nothing to do with the sealing except furnishing the salt, as the Government's contract is to deliver the skins at the ships' side.

Ozerne

19 Aug. '95 o.s.

From	Morshishknik	56
"	Reef	706
"	Kishotnig.	117
		879.

12 Aug. o.s.

From	Kishotchin	231

(7) A deposit is paid in St. Petersburg each year for the next years catch, formerly on 30000 skins, but this last year only on 15000. The government also undertakes to order all the goods to be sold in the stores. Hence much loss and confusion. Seems a very bad arrangement.

Sep. 8 Sunday. anchored at Nikolski 6.30 am.
Mr. G. seems to lay much stress upon the capture of the last 2000 seals so late in the season as an argument in favor of the later arrival of the seals nowadays against a *few* years ago. But really, how much is there in it? Would anybody in earnest maintain that it would have been impossible in former years of abundance to have "raked and scraped" the rookeries late in the season after the main catch of 50000 skins had been taken with a proportionate result? Formerly, the season closed early in August

with a net result of an average of 50000 and nobody cared for anything after that; but it is safe to assert that at least 10000 serviceable skins could have been secured in addition during the following month, if a similar policy of "scraping" had then been pursued. And so with the stagyness of the skins! The first signs of it in those days was sufficient to stop further sealing; now the stagey seals are simply let go and the few good ones taken.

Day beautiful on shore and at the village, but high wind at sea and on the mountains. Spent a pleasant evening aboard the "Pepin" with the captain and officers.

Seals are now spreading. On Aug 19 O.S. 56 skins were taken from Marochnik, and now seals are reported at Fontanka.

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Leonhard Stejneger
U.S. Fish Commission.